



TORQ Analysis of Industrial Machinery Mechanics to Maintenance and Repair Workers, General




INPUT SECTION:

| Transfer | Title | O*NET | Filters | | |
|--------------------|---|------------|------------|----------------------|-----------|
| From Title: | Industrial Machinery Mechanics | 49-9041.00 | Abilities: | Importance Level: 50 | Weight: 1 |
| To Title: | Maintenance and Repair Workers, General | 49-9042.00 | Skills: | Importance Level: 69 | Weight: 1 |
| Labor Market Area: | Maine Statewide | | Knowledge: | Importance Level: 69 | Weight: 1 |

OUTPUT SECTION:

Grand TORQ:












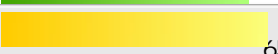
91

| Ability TORQ | | | | Skills TORQ | | | | Knowledge TORQ | | | |
|----------------------------|---|-----|------|----------------------|---|-----|------|---------------------------|---|-----|------|
| Level |  | 87 | | Level |  | 94 | | Level |  | 92 | |
| Gaps To Narrow if Possible | | | | Upgrade These Skills | | | | Knowledge to Add | | | |
| Ability | Level | Gap | Impt | Skill | Level | Gap | Impt | Knowledge | Level | Gap | Impt |
| Inductive Reasoning | 51 | 9 | 62 | Active Listening | 53 | 1 | 70 | Building and Construction | 65 | 13 | 70 |
| Problem Sensitivity | 51 | 7 | 75 | | | | | | | | |
| Information Ordering | 60 | 7 | 68 | | | | | | | | |
| Oral Expression | 51 | 7 | 53 | | | | | | | | |
| Multilimb Coordination | 53 | 2 | 65 | | | | | | | | |
| Visualization | 53 | 2 | 59 | | | | | | | | |
| Deductive Reasoning | 48 | 2 | 56 | | | | | | | | |

LEVEL and IMPT (IMPORTANCE) refer to the Target Maintenance and Repair Workers, General. GAP refers to level difference between Industrial Machinery Mechanics and Maintenance and Repair Workers, General.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

| Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General | Importance |
|------------------------|--|---|--|
| Problem Sensitivity | 44  | 51  | 75  |
| Information Ordering | 53  | 60  | 68  |
| Manual Dexterity | 53  | 48  | 68  |
| Multilimb Coordination | 51  | 53  | 65  |



| | | | | | |
|---------------------|----|--|----|--|----|
| Near Vision | 50 | | 50 | | 65 |
| Inductive Reasoning | 42 | | 51 | | 62 |
| Arm-Hand Steadiness | 48 | | 44 | | 62 |
| Visualization | 51 | | 53 | | 59 |
| Deductive Reasoning | 46 | | 48 | | 56 |
| Selective Attention | 50 | | 44 | | 56 |
| Finger Dexterity | 51 | | 44 | | 56 |
| Static Strength | 50 | | 48 | | 56 |
| Oral Comprehension | 50 | | 50 | | 53 |
| Oral Expression | 44 | | 51 | | 53 |
| Control Precision | 55 | | 48 | | 53 |
| Speech Clarity | 39 | | 34 | | 53 |

Skill Level Comparison - Abilities with importance scores over 69

| Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General | Importance |
|-----------------------|--------------------------------|---|------------|
| Equipment Maintenance | 73 | 69 | 76 |
| Repairing | 74 | 61 | 76 |
| Troubleshooting | 70 | 63 | 72 |
| Active Listening | 52 | 53 | 70 |
| Equipment Selection | 67 | 62 | 70 |
| Installation | 73 | 62 | 70 |

Knowledge Level Comparison - Knowledge with importance scores over 69

| Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General | Importance |
|---------------------------|--------------------------------|---|------------|
| Mechanical | 81 | 78 | 87 |
| Building and Construction | 52 | 65 | 70 |

Experience & Education Comparison

| Related Work Experience Comparison | | | Required Education Level Comparison | | |
|------------------------------------|--------------------------------|---|-------------------------------------|--------------------------------|---|
| Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General | Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General |
| 10+ years | 7% | 0% | Doctoral | 0% | 0% |
| 8-10 years | 8% | 5% | Professional Degree | 0% | 0% |
| 6-8 years | 8% | 7% | Post-Masters Cert | 0% | 0% |
| 4-6 years | 14% | 19% | Master's Degree | 0% | 0% |
| 2-4 years | 17% | 18% | Post-Bachelor Cert | 0% | 0% |
| 1-2 years | 15% | 24% | Bachelors | 7% | 0% |
| 6-12 months | 3% | 4% | AA or Equiv | 1% | 8% |
| 3-6 months | 13% | 0% | Some College | 11% | 21% |
| | | | Post-Secondary | | |



| | | | | | |
|------------|-----|-----|----------------------------|-----|-----|
| 1-3 months | 0% | 0% | Certificate | 36% | 31% |
| 0-1 month | 0% | 10% | High School Diploma or GED | 24% | 25% |
| None | 11% | 8% | No HSD or GED | 17% | 11% |

Industrial Machinery Mechanics

Maintenance and Repair Workers, General

Most Common Educational/Training Requirement:

Long-term on-the-job training

Moderate-term on-the-job training

Job Zone Comparison

3 - Job Zone Three: Medium Preparation Needed

Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

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Tasks

Industrial Machinery Mechanics

Core Tasks

Generalized Work Activities:

- Repairing and Maintaining Mechanical Equipment - Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.

Specific Tasks

Occupation Specific Tasks:

- Analyze test results, machine error messages, and information obtained from operators in order to diagnose equipment problems.
- Clean, lubricate, and adjust parts, equipment, and machinery.

Maintenance and Repair Workers, General

Core Tasks

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- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.

Specific Tasks

Occupation Specific Tasks:

- Adjust functional parts of devices and control instruments, using hand tools, levels, plumb bobs, and straightedges.
- Align and balance new equipment after installation.
- Assemble, install and/or repair wiring,



- Cut and weld metal to repair broken metal parts, fabricate new parts, and assemble new equipment.
- Demonstrate equipment functions and features to machine operators.
- Disassemble machinery and equipment to remove parts and make repairs.
- Enter codes and instructions to program computer-controlled machinery.
- Examine parts for defects such as breakage and excessive wear.
- Observe and test the operation of machinery and equipment in order to diagnose malfunctions, using voltmeters and other testing devices.
- Operate newly repaired machinery and equipment to verify the adequacy of repairs.
- Reassemble equipment after completion of inspections, testing, or repairs.
- Record parts and materials used, and order or requisition new parts and materials as necessary.
- Record repairs and maintenance performed.
- Repair and maintain the operating condition of industrial production and processing machinery and equipment.
- Repair and replace broken or malfunctioning components of machinery and equipment.
- Study blueprints and manufacturers' manuals to determine correct installation and operation of machinery.

Detailed Tasks

Detailed Work Activities:

- adhere to safety procedures
- adjust or set mechanical controls or components
- adjust production equipment/machinery setup
- align or adjust clearances of mechanical components or parts
- analyze operation of malfunctioning electrical or electronic equipment
- apply cleaning solvents
- assemble and install pipe sections, fittings, or plumbing fixtures
- assemble, dismantle, or reassemble equipment or machinery
- bend tubing or conduit
- braze metal parts or components together
- calibrate or adjust electronic equipment or instruments to specification
- conduct performance testing
- conduct tests to locate mechanical system malfunction
- control HVAC equipment
- coordinate production maintenance

electrical and electronic components, pipe systems and plumbing, machinery, and equipment.

- Clean and lubricate shafts, bearings, gears, and other parts of machinery.
- Diagnose mechanical problems and determine how to correct them, checking blueprints, repair manuals, and parts catalogs as necessary.
- Dismantle devices to gain access to and remove defective parts, using hoists, cranes, hand tools, and power tools.
- Estimate repair costs.
- Fabricate and repair counters, benches, partitions, and other wooden structures such as sheds and outbuildings.
- Grind and reseal valves, using valve-grinding machines.
- Inspect drives, motors, and belts, check fluid levels, replace filters, and perform other maintenance actions, following checklists.
- Inspect used parts to determine changes in dimensional requirements, using rules, calipers, micrometers, and other measuring instruments.
- Inspect, operate, and test machinery and equipment in order to diagnose machine malfunctions.
- Lay brick to repair and maintain buildings, walls, arches and other structures.
- Maintain and repair specialized equipment and machinery found in cafeterias, laundries, hospitals, stores, offices, and factories.
- Operate cutting torches or welding equipment to cut or join metal parts.
- Order parts, supplies, and equipment from catalogs and suppliers, or obtain them from storerooms.
- Paint and repair roofs, windows, doors, floors, woodwork, plaster, drywall, and other parts of building structures.
- Perform routine preventive maintenance to ensure that machines continue to run smoothly, building systems operate efficiently, and the physical condition of buildings does not deteriorate.
- Plan and lay out repair work using diagrams, drawings, blueprints, maintenance manuals, and schematic diagrams.
- Record maintenance and repair work performed and the costs of the work.
- Repair or replace defective equipment parts using hand tools and power tools, and reassemble equipment.
- Set up and operate machine tools to repair or fabricate machine parts, jigs and fixtures, and tools.
- Use tools ranging from common hand and power tools, such as hammers, hoists, saws, drills, and wrenches, to precision measuring instruments and electrical and



activities

- cut, bend, or thread pipe for gas, air, hydraulic, or water lines
- determine installation, service, or repair needed
- develop maintenance schedules
- diagnose mechanical problems in machinery or equipment
- fabricate, assemble, or disassemble manufactured products by hand
- identify base metals for welding
- identify properties of metals for repair or fabrication activities
- inspect machinery or equipment to determine adjustments or repairs needed
- install electrical conduit or tubing
- install electrical fixtures or components
- install electronic equipment, components, or systems
- install electronic power, communication, control, or security equipment or systems
- install equipment or attachments on machinery or related structures
- install industrial machinery or related heavy equipment
- install or replace meters, regulators, or related measuring or control devices
- install water or sewer treatment plant equipment
- install/connect electrical equipment to power circuit
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain or repair small engines
- maintain or repair work tools or equipment
- maintain repair records
- maintain specialized manufacturing or commercial equipment or machinery
- maintain welding machines or equipment
- move or fit heavy objects
- observe or listen to machinery or equipment operation to detect malfunctions
- obtain information from individuals
- operate crane in construction, manufacturing or repair setting
- operate hoist, winch, or hydraulic boom
- operate pneumatic test equipment
- order or purchase supplies, materials, or equipment
- overhaul industrial or construction machinery or equipment
- overhaul power-generating equipment or machinery
- perform detailed welding techniques
- perform hydraulic plumbing

electronic testing devices.

Detailed Tasks

Detailed Work Activities:

- adhere to safety procedures
- adjust or set mechanical controls or components
- align or adjust clearances of mechanical components or parts
- apply cleaning solvents
- assemble and install pipe sections, fittings, or plumbing fixtures
- assemble, dismantle, or reassemble equipment or machinery
- bend tubing or conduit
- build or repair structures in construction, repair, or manufacturing setting
- burn (cut), trim, or scarf metal objects
- climb ladders, scaffolding, or utility or telephone poles
- conduct tests to locate mechanical system malfunction
- construct, erect, or repair wooden frameworks or structures
- control HVAC equipment
- coordinate production maintenance activities
- cut, bend, or thread pipe for gas, air, hydraulic, or water lines
- cut, shape, fit, or join wood or other construction materials
- determine installation, service, or repair needed
- diagnose mechanical problems in machinery or equipment
- erect scaffold
- estimate time or cost for installation, repair, or construction projects
- fabricate sheet metal parts or items
- fabricate, assemble, or disassemble manufactured products by hand
- follow safe waste disposal procedures
- identify properties of metals for repair or fabrication activities
- inspect machinery or equipment to determine adjustments or repairs needed
- install doors, wood floors, window frames, trim, or stairs
- install electrical fixtures or components
- install electronic equipment, components, or systems
- install equipment or attachments on machinery or related structures
- install industrial machinery or related heavy equipment
- install insulating materials
- install locks, hinges, or related finish hardware



- perform safety inspections in industrial, manufacturing or repair setting
- position, align, or level machines, equipment, or structures
- program computer numerical controlled machines
- read blueprints
- read schematics
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair computer controlled manufacturing systems
- repair or adjust measuring or control devices
- repair or replace electrical wiring, circuits, fixtures, or equipment
- repair or replace malfunctioning or worn mechanical components
- repair plastics manufacturing equipment
- repair sheet metal products
- replace electronic components
- requisition stock, materials, supplies or equipment
- set up and operate variety of machine tools
- set up computer numerical control machines
- solder electrical or electronic connections or components
- solder metal parts or components together
- test electrical/electronic wiring, equipment, systems or fixtures
- test electronic or electrical circuit connections
- test mechanical products or equipment
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use 2-cycle engine technology
- use acetylene welding/cutting torch
- use arc welding equipment
- use basic plumbing techniques
- use braze-welding equipment
- use combination welding procedures
- use control or regulating devices to adjust or maintain industrial machinery
- use electrical or electronic test devices or equipment
- use electronic calibration devices
- use hand or power tools
- use high voltage apparatus
- use knowledge of metric system
- use knowledge of welding filler rod types
- use machine tools in installation, maintenance, or repair

Install/Repair

- install or replace glass in windows, skylights, or other structural surfaces
- install or replace meters, regulators, or related measuring or control devices
- install shingles, tile, slate, asphalt, or related roofing materials
- install/connect electrical equipment to power circuit
- install/string electrical or electronic cable or wiring
- lay or install brick, block, stone, tile, or related masonry material
- lubricate machinery, equipment, or parts
- maintain or repair industrial or related equipment/machinery
- maintain or repair work tools or equipment
- maintain repair records
- maintain specialized manufacturing or commercial equipment or machinery
- maintain welding machines or equipment
- measure and mark reference points or cutting lines on workpieces
- move or fit heavy objects
- observe or listen to machinery or equipment operation to detect malfunctions
- operate crane in construction, manufacturing or repair setting
- operate hoist, winch, or hydraulic boom
- order or purchase supplies, materials, or equipment
- paint walls or other structural surfaces
- perform safety inspections in industrial, manufacturing or repair setting
- plan or organize work
- position, align, or level machines, equipment, or structures
- prepare building surfaces for paint, finishes, wallpaper, or adhesives
- pressure test piping system or equipment for leaks
- read blueprints
- read schematics
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- repair cracks, defects, or damage in installed building materials
- repair electronic components, equipment, or systems
- repair or adjust measuring or control devices
- repair or replace electrical wiring, circuits, fixtures, or equipment
- repair or replace gas, steam, sewer, or water piping or fixtures



maintenance, or repair

- use pipe fitting equipment
- use pneumatic tools
- use pollution control techniques
- use precision measuring devices in mechanical repair work
- use pressure gauges
- use robotics systems technology
- use soldering equipment
- use tube bending equipment
- verify levelness or verticality, using level or plumb bob
- weld together metal parts, components, or structures

Technology - Examples

Computer aided design CAD software

- Computer aided design CAD software

Computer aided manufacturing CAM software

- Extranet Machine Tools Suite

Data base user interface and query software

- Maintenance planning and control software

Facilities management software

- Maintenance management software

Industrial control software

- BIT Corp ProMACS PLC
- KEYENCE PLC Ladder Logic

Office suite software

- Microsoft Office

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Pliers
- Wrenches
- Compressors
- Alignment tools
- Ammeters
- Stud drivers
- Bandsaws
- Vises

- repair or replace locks, hinges, or related finish hardware
- repair or replace malfunctioning or worn mechanical components
- replace electronic components
- requisition stock, materials, supplies or equipment
- set up and operate variety of machine tools
- solder electrical or electronic connections or components
- test electrical/electronic wiring, equipment, systems or fixtures
- test mechanical products or equipment
- understand service or repair manuals
- understand technical operating, service or repair manuals
- use acetylene welding/cutting torch
- use arc welding equipment
- use basic carpentry techniques
- use basic plumbing techniques
- use building materials for routine building maintenance
- use combination welding procedures
- use control or regulating devices to adjust or maintain industrial machinery
- use electrical or electronic test devices or equipment
- use hand or power tools
- use hand or power woodworking tools
- use high voltage apparatus
- use knowledge of metric system
- use knowledge of ventilation systems
- use knowledge of welding filler rod types
- use machine tools in installation, maintenance, or repair
- use measuring devices in repairing industrial or heavy equipment
- use pipe fitting equipment
- use precision measuring devices in mechanical repair work
- use precision tools in electronics repair
- use pressure gauges
- use soldering equipment
- use tube bending equipment
- use voltmeter, ammeter, or ohmmeter
- verify levelness or verticality, using level or plumb bob
- weld together metal parts, components, or structures

Technology - Examples

Calendar and scheduling software

- Computerized time management systems

Electronic mail software



- Block and tackle equipment

- Acetylene torches

- Boring machines

- Broaching machines

- Calipers

- Reciprocating machinery combustion analyzers

- Airhammer chisels

- Combination wrenches

- Cutting dies

- Desktop computers

- Equipment rollers

- Side cutting pliers

- Angled feeler gauges

- Files

- Flow meters

- Forklifts

- Brazing equipment

- Shaping machines

- Grease guns

- Lapping wheels

- Brass hammers

- Hand pumps

- Gauges

- Allen wrenches

- Chain falls

- Impact wrenches

- Bearing heating ovens

- Jacks

- Ladders

- Laser measuring equipment

- Computer printers

- Engine lathes

- Microsoft Outlook

Facilities management software

- Computerized maintenance management system CMMS software

Industrial control software

- Digital Direct Control DDC Energy Management software

Internet browser software

- Web browser software

Office suite software

- Microsoft Office

Spreadsheet software

- Microsoft Excel

Word processing software

- Microsoft Word

Tools - Examples

- Adjustable widemouth pliers

- Adjustable crescent wrenches

- Air compressors

- Security alarm systems

- Volt-ammeters

- Augers

- Tractors with backhoe attachments

- Workshop bench vises

- Biscuit joiners

- Block and tackle equipment

- Cutting torches

- Locking C-clamps

- Dial calipers

- Caulking guns

- Metal chisels

- Conduit benders

- Desktop computers

- Utility pumps

- Diagonal cut pliers



- Transits
- Level gauges
- Channel lock pliers
- Magnetic retrievers
- Alignment scopes
- Rubber mallets
- Metal inert gas MIG welders
- Punches
- Programmable logic controllers PLC
- Inside micrometers
- Cutting machines
- Milling machines
- Multimeters
- Needlenose pliers
- Oscilloscopes
- Personal computers
- Facing machines
- Pipe wrenches
- Screw pitch gauges
- Plasma cutters
- Staging platforms
- Plumb bobs
- Airpowered descaling drills
- Pneumatic hammers
- Airpowered descaling turbines
- Jigs
- Power drills
- Cylindrical grinders
- Sanders
- Power saws
- Steam cleaning equipment
- Pressure gauges

- Dollies
- Closet augers
- Plungers
- Dump trucks
- Side cutting pliers
- Feeler gauges
- Hand files
- Fish tape pullers
- Two-wheel drive front end loaders
- Fuse pullers
- Brazing equipment
- Dial indicators
- Safety goggles
- Grease guns
- Hand grinders
- Valve grinding machines
- Hammer drills
- Ball peen hammers
- Hand operated spray guns
- Hand trucks
- Electric trimmers
- Allen wrenches
- Hoisting equipment
- Circle cutters
- Gasket cutters
- Boom trucks
- Hand jacks
- Step ladders
- Lathes
- Lawn mowers
- Bubble levels
- Power lifts



- Hydrostatic testers

- Optical measuring equipment

- Pinchbars

- Hydraulic pullers

- Putty knives

- Ratchet sets

- Reamers

- Burnishing wheels

- Riveting machines

- Rulers

- Welding lenses

- Handsaws

- Scissor lifts

- Scrapers

- Phillips head screwdrivers

- Rigging

- Socket sets

- Soldering irons

- Cylindrical procedures squares

- Straightedges

- Bearing bridge gauges

- Vacuum lifts

- Strobe tachometers

- Tape measures

- Taps

- Space gauges

- Pipe threaders

- Aviation snips

- Emery wheels

- Tungsten inert gas TIG welding equipment

- Radial drills

- Utility knives

- Ultrasonic leak detectors

- Channel lock pliers

- Inspection mirrors

- Rubber mallets

- Digital micrometers

- Miter boxes

- Needlenose pliers

- Laptop computers

- Nut drivers

- Hollow core socket wrenches

- Ohmmeters

- Oil dispensing cans

- Paint application brushes

- Paint application rollers

- Paint spray guns

- Personal computers

- Handheld computers

- Copper cutting machines

- Pipe vises

- End pipe wrenches

- Plumb bobs

- Jackhammers

- Chipping hammers

- Cordless power drills

- Electric nail guns

- Electric planers

- Power routers

- Electric sanders

- Circular saws

- High pressure water sprayers

- Safety gloves

- Crowbars



- Vacuum gauges

- Vibration analyzers

- Voltmeters

- Steel wedges

- Arc welders

- Welding shields

- Robotic teach pendants

- Tip dressing machines

- Electric welding equipment

- Electric rotary wire brushes

- Wire cutters

- Cranes

- Drill presses

- Bearing pullers

- Center punches

- Putty knives

- Comealongs

- Dust and particulate respirators

- Rulers

- Protective harnesses

- Protective footwear

- Hacksaws

- Scaffolding

- Screw extractor sets

- Flat blade screwdrivers

- Scribing tools

- Sewage pumps

- Sharpening equipment

- Shears

- Rigging equipment

- Slip joint pliers

- Snow blowers

- Snow plows

- Socket wrench sets

- Soldering equipment

- Basin wrenches

- Combination squares

- Straightedges

- Wire strippers

- Stud locators

- Measuring tapes

- Taps and dies

- Tension gauges

- Pipe threaders

- Tin snips



- Torque wrenches
- Trenchers
- Concrete trowels
- Tube benders
- Flaring tools
- Portable two way radios
- Utility knives
- Current testers
- Water sampling equipment
- Arc welders
- Wire cutting tools
- Wire crimpers
- Conduit cutters
- Workshop cranes
- Drill presses

Labor Market Comparison

| Description | Industrial Machinery Mechanics | Maintenance and Repair Workers, General | Difference |
|---------------------------------------|--------------------------------|---|------------|
| Median Wage | \$ 39,370 | \$ 31,020 | \$(8,350) |
| 10th Percentile Wage | \$ 28,150 | \$ 21,110 | \$(7,040) |
| 25th Percentile Wage | N/A | N/A | N/A |
| 75th Percentile Wage | \$ 48,040 | \$ 38,440 | \$(9,600) |
| 90th Percentile Wage | \$ 56,740 | \$ 49,520 | \$(7,220) |
| Mean Wage | \$ 40,830 | \$ 32,940 | \$(7,890) |
| Total Employment - 2007 | 990 | 5,140 | 4,150 |
| Employment Base - 2006 | 1,021 | 5,391 | 4,370 |
| Projected Employment - 2016 | 1,096 | 5,572 | 4,476 |
| Projected Job Growth - 2006-2016 | 7.4 % | 3.4 % | -4.0 % |
| Projected Annual Openings - 2006-2016 | 25 | 31 | 6 |

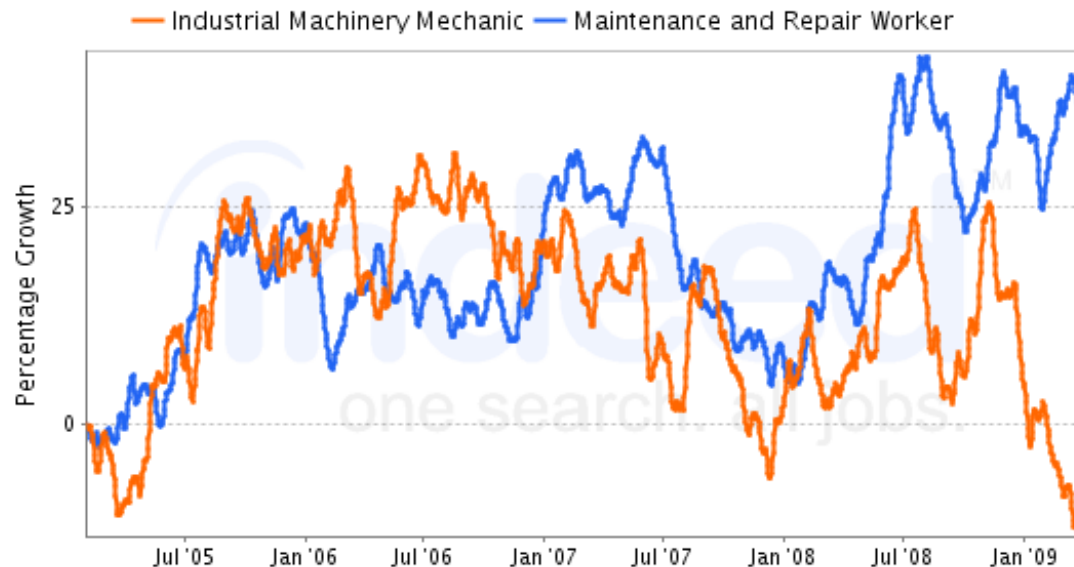
National Job Posting Trends



Trend for Industrial Machinery Mechanics

Trend for
Maintenance
and Repair
Workers,
General

Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

Recommended Programs

Agricultural Mechanization, General

Agricultural Mechanization, General. A program that generally prepares individuals to sell, select, and service agricultural or agribusiness technical equipment and facilities, including computers, specialized software, power units, machinery, equipment structures, and utilities. Includes instruction in agricultural power systems; planning and selecting materials for the construction of support facilities; mechanical practices associated with irrigation and water conservation; erosion control; and agricultural data processing systems.

No schools available for the program

Building/Property Main. and Manager

Building/Property Maintenance and Management. A program that prepares individuals to apply technical knowledge and skills to keep a building functioning, and to service a variety of structures including commercial and industrial buildings and mobile homes. Includes instruction in the basic maintenance and repair skills required to service building systems, such as air conditioning, heating, plumbing, electrical, major appliances, and other mechanical systems.

No schools available for the program

Building/Construction Site Management/Manager

Building/Construction Site Management/Manager. A program that prepares individuals to supervise, manage, and inspect construction sites, buildings, and associated facilities. Includes instruction in site safety, personnel supervision, labor relations, diversity training, construction documentation, scheduling, resource and cost control, bid strategies, rework prevention, construction insurance and bonding, accident management and investigation, applicable law and regulations, and communication skills.

No schools available for the program

Mechanics and Repairers, Other

Mechanic and Repair Technologies/Technicians, Other. Any instructional program in mechanics and repairs not listed above.

| Institution | Address | City | URL |
|------------------------------------|-------------------|--------|--|
| Wasington County Community College | One College Drive | Calais | www.wccc.me.edu |
| Wasington County Community College | One College Drive | Calais | www.wccc.me.edu |



Maine Statewide Promotion Opportunities for Industrial Machinery Mechanics

| O*NET Code | Title | Grand TORQ | Job Zone | Employment | Median Wage | Difference | Growth | Annual Job Openings |
|------------|---|------------|----------|------------|-------------|-------------|--------|---------------------|
| 49-9041.00 | Industrial Machinery Mechanics | 100 | 3 | 990 | \$39,370.00 | \$0.00 | 7% | 25 |
| 49-9044.00 | Millwrights | 92 | 3 | 830 | \$41,280.00 | \$1,910.00 | -12% | 11 |
| 51-4111.00 | Tool and Die Makers | 88 | 3 | 160 | \$51,670.00 | \$12,300.00 | -11% | 2 |
| 51-4041.00 | Machinists | 87 | 3 | 1,860 | \$41,560.00 | \$2,190.00 | 4% | 35 |
| 49-2094.00 | Electrical and Electronics Repairers, Commercial and Industrial Equipment | 87 | 3 | 440 | \$49,450.00 | \$10,080.00 | -19% | 15 |
| 51-4192.00 | Lay-Out Workers, Metal and Plastic | 86 | 2 | 180 | \$43,870.00 | \$4,500.00 | -24% | 3 |
| 51-4011.00 | Computer-Controlled Machine Tool Operators, Metal and Plastic | 86 | 2 | 720 | \$40,490.00 | \$1,120.00 | 6% | 12 |
| 47-4021.00 | Elevator Installers and Repairers | 85 | 4 | 0 | \$50,960.00 | \$11,590.00 | 0% | 0 |
| 49-9012.00 | Control and Valve Installers and Repairers, Except Mechanical Door | 85 | 3 | 170 | \$47,860.00 | \$8,490.00 | -9% | 3 |
| 49-2095.00 | Electrical and Electronics Repairers, Powerhouse, Substation, and Relay | 85 | 5 | 20 | \$60,790.00 | \$21,420.00 | 5% | 1 |
| 49-3011.00 | Aircraft Mechanics and Service Technicians | 84 | 3 | 210 | \$44,280.00 | \$4,910.00 | -2% | 2 |
| 53-6051.07 | Transportation Vehicle, Equipment and Systems Inspectors, Except Aviation | 83 | 3 | 60 | \$42,890.00 | \$3,520.00 | 5% | 2 |
| 47-2111.00 | Electricians | 82 | 3 | 2,910 | \$43,650.00 | \$4,280.00 | 1% | 89 |
| 17-3023.01 | Electronics Engineering Technicians | 81 | 3 | 430 | \$45,180.00 | \$5,810.00 | -20% | 9 |
| 49-9061.00 | Camera and Photographic Equipment Repairers | 81 | 3 | 0 | \$44,660.00 | \$5,290.00 | 0% | 0 |

Top Industries for Maintenance and Repair Workers, General



| Industry | NAICS | % in Industry | Employment | Projected Employment | % Change |
|--|--------|---------------|------------|----------------------|----------|
| Lessors of real estate | 531100 | 9.05% | 125,853 | 138,660 | 10.18% |
| Local government, excluding education and hospitals | 939300 | 7.30% | 101,552 | 114,081 | 12.34% |
| Activities related to real estate | 531300 | 5.42% | 75,449 | 96,150 | 27.44% |
| Elementary and secondary schools, public and private | 611100 | 3.99% | 55,510 | 58,497 | 5.38% |
| Colleges, universities, and professional schools, public and private | 611300 | 2.72% | 37,891 | 42,390 | 11.87% |
| General medical and surgical hospitals, public and private | 622100 | 2.48% | 34,495 | 38,189 | 10.71% |
| Religious organizations | 813100 | 2.44% | 33,871 | 40,648 | 20.01% |
| Employment services | 561300 | 2.30% | 31,932 | 40,414 | 26.56% |
| State government, excluding education and hospitals | 929200 | 1.58% | 21,973 | 21,562 | -1.87% |
| Offices of real estate agents and brokers | 531200 | 1.45% | 20,200 | 24,604 | 21.81% |
| Nursing care facilities | 623100 | 1.36% | 18,977 | 20,624 | 8.68% |
| Management of companies and enterprises | 551100 | 1.34% | 18,609 | 21,453 | 15.28% |
| Plastics product manufacturing | 326100 | 1.10% | 15,246 | 16,161 | 6.00% |
| Motor vehicle parts manufacturing | 336300 | 0.96% | 13,311 | 10,598 | -20.39% |
| Animal slaughtering and processing | 311600 | 0.91% | 12,633 | 14,418 | 14.13% |

Top Industries for Industrial Machinery Mechanics

| Industry | NAICS | % in Industry | Employment | Projected Employment | % Change |
|---|--------|---------------|------------|----------------------|----------|
| Commercial and industrial machinery and equipment (except automotive and electronic) repair and maintenance | 811300 | 7.91% | 20,611 | 25,083 | 21.70% |
| Motor vehicle parts manufacturing | 336300 | 3.70% | 9,644 | 8,829 | -8.44% |
| Plastics product manufacturing | 326100 | 3.58% | 9,327 | 11,369 | 21.90% |
| Self-employed workers, primary job | 000601 | 2.49% | 6,497 | 7,960 | 22.52% |
| Electric power generation, transmission and distribution | 221100 | 2.40% | 6,265 | 6,626 | 5.77% |
| Converted paper product manufacturing | 322200 | 2.30% | 5,998 | 5,789 | -3.49% |
| Pulp, paper, and paperboard mills | 322100 | 2.25% | 5,865 | 4,678 | -20.23% |
| Animal slaughtering and processing | 311600 | 2.25% | 5,866 | 7,700 | 31.25% |
| Local government, excluding education and hospitals | 939300 | 2.03% | 5,296 | 6,841 | 29.19% |
| Fruit and vegetable preserving and specialty food manufacturing | 311400 | 2.02% | 5,259 | 5,484 | 4.27% |
| Basic chemical manufacturing | 325100 | 1.87% | 4,881 | 4,734 | -3.02% |

| | | | | | |
|--|--------|-------|-------|-------|---------|
| Federal government, excluding postal service | 919999 | 1.81% | 4,706 | 5,116 | 8.71% |
| Petroleum and coal products manufacturing | 324100 | 1.46% | 3,797 | 3,296 | -13.18% |
| Semiconductor and other electronic component manufacturing | 334400 | 1.39% | 3,633 | 3,652 | 0.52% |
| Bakeries and tortilla manufacturing | 311800 | 1.36% | 3,536 | 4,154 | 17.47% |